

ABSTRACT OF THE DISCLOSURE

A semiconductor storage device has memory function bodies (261, 262) having a function to retain electric charges, which are formed on opposite sides of a single gate electrode (217) provided on a semiconductor layer (211) with a gate insulation film (214) disposed therebetween. Each memory function body includes a charge retention film (242) having a charge storage region (250). The charge storage regions (250) exist over part of the channel region (273) and part of diffusion regions (212, 213) on both sides of the channel region. Because the memory function bodies are formed on both sides of the gate electrode, independently of the gate insulation film, 2-bit operations are possible. Because the memory function bodies are separated from each other by the gate electrode, interference during rewrite operation is effectively suppressed. Also, short-channel effect is suppressed through thinning of the gate insulation film. Miniaturization of memory elements is thus facilitated.